

CARRIER HEAD WITH FLEXIBLE MEMBRANE**ABSTRACT**

A carrier head for chemical mechanical polishing of a substrate includes a base and a flexible membrane extending beneath the base. The flexible membrane includes a central portion with an outer surface providing a substrate receiving surface, a perimeter portion connecting the central portion to the base, and at least one flap extending from an inner surface of the central portion. The flap divides a volume between the flexible membrane and the base into a plurality of chambers, and the flap includes a laterally extending first section and an angled second section extending beneath the first section and connecting the laterally extending first section to the central portion.

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